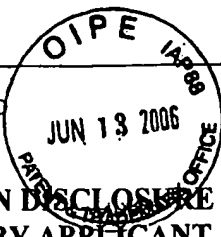


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(Revised 07/2005)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Rowley
Group Art Unit	1651
Examiner Name	Naff, David M.
Attorney Docket Number	P-5645P1 (035510/296472)

Sheet 1 of 1

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
an	1	US-5,766,631	06-1998	Arnold	424/486
an	2	US-5,866,165	02-1999	Liu et al.	424/486
an	3	US-2003/0095993	05-2003	Bentz et al.	424/424
an	4	US-2003/0032203	02-2003	Sabatini et al.	436/518
an	5	US-5,747,027	05-1998	Stern et al.	424/94.62

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached

OTHER DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	English Language Translation Attached
an	6	DOILLON, C.J., et al., "Fibroblast Growth on a Porous Collagen Sponge containing Hyaluronic Acid and Fibronectin," <i>Biomaterials</i> , 1987, pp. 195-200., Vol. 8.	
an	7	HUANG-LEE, L.L.H., et al., "Crosslinked CNBr-Activated Hyaluronan-Collagen Matrices: Effects of Fibroblast Contraction," <i>Matrix Biology</i> , 1994, pp. 147-157, Vol. 14.	
an	8	MIDDELKOOP E., et al., "Adherence, Proliferation and Collagen Turnover by Human Fibroblasts Seeded onto Different Types of Collagen Sponges," <i>Cell Tissue Res.</i> , 1995, pp. 447-453, Vol. 280.	

Examiner
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Date
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9/14/04

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Application Number 10/673,438

Filing Date 9-30-2003

First Named Inventor Rowley et al.

Art Unit 1651

Examiner Name TBD

Sheet




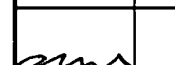
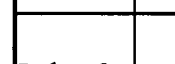
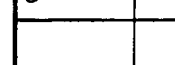
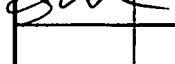
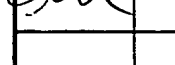
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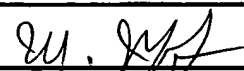
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Attorney Docket Number P-5645P1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		KOWALCZYNSKA, Adsorption characteristics of human plasma fibronectin in relationship to cell adhesion, Journal of Biomedical Materials Res. 61, no. 2, 2002, pp. 260-269	
		CHEN, Hybrid Biomaterials for Tissue Engineering: A Preparative Method for PLA or PLGA- Collagen Hybrid Sponges, Advanced Materials, 12, no. 6, 2000, pp. 455-457	
		WOO, Enhance. of Fibronectin- and Vitronectin-Adsorption to Polymer/Hydroxyapatite Scaffolds Suppresses the Apoptosis of Osteoblasts, J. of Bone and Min. Res., 17, 1, 2002,	
		NOISET, Fibronectin Adsorption or/and Covalent Grafting on Chemically Modified Peek Film Surfaces, J. Biomater. Sci. Polymer Edn., 10, no. 6, pp. 657-677, 1999	
		CIVERCHIA-PEREZ, Use of Collagen Hydroxyethylmethacrylate Hydrogels for Cell Growth, Prac. Natl. Acad. Sci. USA, 77, no. 4, 1980, pp. 2064-68	
		LEE, Preparation and Characteristics of Hybrid Scaffolds composed of beta-chitin and Collagen, Biomaterials 25, no. 12, 2004, pp. 2309-2317	
		CARBONETTO, Nerve Fiber Growth on Defined Hydro Gel Substrates, Science 216, no. 4548, 1982, pp. 897-899	
		International Search Report, PC/US2004/027865, Mailed April 4, 2005.	

Examiner
Signature Date
Considered

9/14/06

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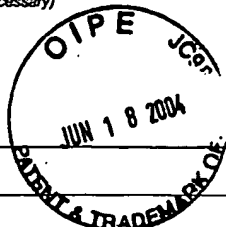
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Rowley, Jon
Group Art Unit	1651
Examiner Name	Unknown

Sheet 1 of 1

Attorney Docket No: 0709.011.0003

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
<i>an</i>	WO-WO 01/49824 A	07/12/2001	<i>Domschke et al</i>	—	—	
<i>an</i>	WO-WO 97/17038 A	05/15/1997	<i>Vacanti</i>	—	—	
<i>an</i>	WO-WO00/61668 A	10/19/2000	<i>Elseit et al</i>	—	—	
<i>an</i>	WO-WO01/66695	09/13/2001	<i>Gruskin et al</i>	—	—	

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>an</i>		PCT International Search Report for International Application No. PCT/US 03/30649	

EXAMINER

DATE CONSIDERED

9/14/04

Substitute Disclosure Statement Form (PTO-1449)

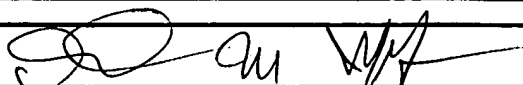
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		Application Number	10/673,438
		Filing Date	09/30/2003
		First Named Inventor	HEIDARAN et al.
		Art Unit	
		Examiner Name	
Sheet	2	of	3
		Attorney Docket Number	P-5645P1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
an		CHUNG et al, Biomaterials (2003) 23:2827-2834.	
an		DRAGET et al., Int J. Biol. Macromolecules (1997) 21:47-55.	
an		KIM et al. Fibers and Polymers (2001) 2:64-70.	
an		KOBAYASHI et al., Biomaterials (1991) 12:747-51.	
an		KOBAYASHI et al., Current Eye Research (1991) 10:899-908.	
an		MATSUDA et al., ASAIO J, (1993) 39:M327-31.	
an		MATSUDA et al., ASAIO J, (1992) 38:M154-7.	
an		MOGHADDAM et al., J. Polym. Sci. Part A: Polym. Chem. (1993) 31:1589-97.	
an		MOGHADDAM et al., ASAIO Trans, (1991) 37:M437-8.	
an		PARK et al., Nature Biotechnology (2002) 20:1111-17.	

Examiner Signature		Date Considered	9/14/04
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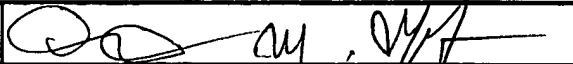
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		Application Number	10/673,438
		Filing Date	09/30/2003
		First Named Inventor	HEIDARAN et al.
		Art Unit	
		Examiner Name	
Sheet	3	of	3
		Attorney Docket Number	P-5645P1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
an		PETRONIS et al., Journal of Materials Science: Materials in Medicine (2001) 12:523-28.	
an		PRESTWICH et al., J. Controlled Release (1998) 53:93-103.	
an		SHAPIRO et al., Biomaterials (1997) 18:583-590.	
an		SHEA et al., Nature Biotechnology (1999) 17:551-54.	
an		SMIDSRD et al., Trends in Biotech., (1990) 8:71-78.	
an		ZHU et al., Biomaterials, (2002) 23:3141-3148.	
an		ZMORA et al., Biomaterials (2002) 23:4087-4094.	

Examiner Signature		Date Considered	9/14/06
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 7

Complete If Known

Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Jon Rowley et al.
Art Unit	1651
Examiner Name	Unassigned
Attorney Docket Number	020187.239PTUS

NON PATENT LITERATURE DOCUMENTS

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an	1	ALSBERG E, et al., "Cell-interactive Alginate Hydrogels for Bone Tissue Engineering," J. Dent. Res. 80(11):2025-9, November 2001	
an	2	ALSBERG E, et al., "Engineering Growing Tissues", Proc. Natl. Acad. Sci. U. S. A. 99(19):12025-30, September 2002.	
an	3	BALGUDE A, et al., "Agarose Gel Stiffness Determines Rate of DRG Neurite Extension in 3D Cultures," Biomaterials. 22(10):1077-84(2001).	
an	4	BELLAMKONDA R, et al., "Hydrogel-based Three-Dimensional Matrix for Neural Cells," J. Biomed. Mater. Res. 29(5):663-71(1995).	
an	5	BHATIA S et al., "Tissue Engineering at the Micro-scale," Biomed. Microdevices. 2(2):131-44(March 1999).	
an	6	BOTTARO D, et al., "Molecular Signaling in Bioengineered Tissue Microenvironments," Ann. N.Y. Acad. Sci. 961:143-53(2002).	
an	7	BRYANT S, et al., "Controlling the Spatial Distribution of ECM Components in Degradable PEG Hydrogels for Tissue Engineering Cartilage," J. Biomed. Mater. Res. 64A(1):70-9(January 2003).	
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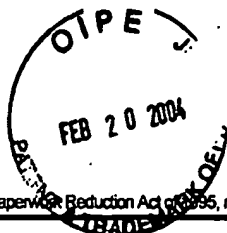
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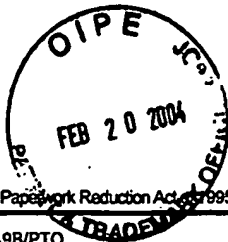
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		Application Number	10/673,438
		Filing Date	September 30, 2003
		First Named Inventor	Jon Rowley et al.
		Art Unit	1651
		Examiner Name	Unassigned
		Attorney Docket Number	020187.0239PTUS

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>am</i>	14	DIMILLA P, et al., "Maximal Migration of Human Smooth Muscle Cells on Fibronectin and Type IV Collagen Occurs at an Intermediate Attachment Strength," J. Cell. Biol. 122(3):729-37(August 1993).	
<i>am</i>	15	DRUMHELLER P, et al., "Polymer Networks with Grafted Cell Adhesion Peptides for Highly Biospecific Cell Adhesive Substrates," Anal. Biochem. 222:380-88(1994).	
<i>am</i>	16	EISELT P, et al., "Porous Carriers for Biomedical Applications based on Alginate Hydrogels," Biomaterials. 21(19):1921-7(2000).	
<i>am</i>	17	ELISSEEFF J, et al., "Controlled-Release of IGF-I and TGF- β 1 in a Photopolymerizing Hydrogel for Cartilage Tissue Engineering," J. Orthop. Res. 19(6):1098-104(2001).	
<i>am</i>	18	GARFINKEL M, et al., "Optimization of the Microencapsulated Islet for Transplantation," J. Surg. Res. 76(1):7-10(1998).	
<i>am</i>	19	GRIFFITH L, et al., "Tissue Engineering--Current Challenges and Expanding Opportunities," Science. 295(5557):1009-14(February 2002).	
<i>am</i>	20	GLICKLIS R, et al., "Hepatocyte Behavior within Three-dimensional Porous Alginate Scaffolds," Biotechnol. Bioeng. 67(3):344-53(February 2000).	
<i>am</i>	21	HALBERSTADT C, et al., "A Hydrogel Material for Plastic and Reconstructive Applications Injected into the Subcutaneous Space of a Sheep," Tissue Eng. 8(2):309-19(2002).	
<i>am</i>	22	HAY E., Cell Biology of Extracellular Matrix, 2nd edition, Plenum Press, 1991.	
<i>am</i>	23	HERN D, et al., "Incorporation of Adhesion Peptides into Nonadhesive Hydrogels Useful for Tissue Resurfacing," J. Biomed. Mater. Res. 39(2):266-76(1998).	
<i>am</i>	24	HOBBS H, et al., "Prevention of Morphological Changes in Alginate Microcapsules for Islet Xenotransplantation," J. Investig. Med. 49(6):572-5(November 2001).	
Examiner Signature	<i>[Signature]</i>		Date Considered <i>9/14/06</i>

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Sheet 3 of 7

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Application Number	10/673,438
Filing Date	September 30, 2003
First Named Inventor	Jon Rowley et al.
Art Unit	1651
Examiner Name	Unassigned
Attorney Docket Number	020187.0239PTUS

NON PATENT LITERATURE DOCUMENTS

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an	25	HUBBELL J., "Biomaterials in Tissue Engineering," Biotechnology (N.Y.) 13(6):565-76(June 1995).	
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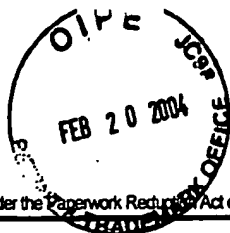
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		Application Number	10/673,438		
		Filing Date	September 30, 2003		
		First Named Inventor	Jon Rowley et al.		
		Art Unit	1651		
		Examiner Name	Unassigned		
Sheet	4	of	7	Attorney Docket Number	020187.0239PTUS

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
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Sheet 6 of 7

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